

Upcoming Meetings

Saturday, February 8 7:30 p.m.

KAON Observing Session
Prof. Kristine Spekkens
(Royal Military College)

Thursday, February 13 7:00 p.m.

Dr. Bruce Macintosh
(Stanford University
and
Lawrence Livermore National Laboratory)
*Pictures of Other Worlds:
Directly Imaging Extrasolar Planets*

Thursday, March 8 7:30 p.m.

KAON Observing Session

Thursday, March 13 7:00 p.m.

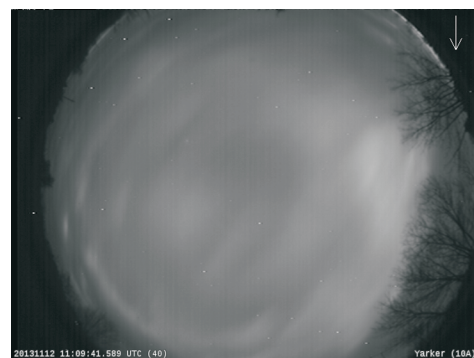
Dr. John Percy
*Variable Stars—And How
People Like You Can Help*

Thursday, March 20 2:00 a.m.

Occultation of Regulus by
Asteroid Erigone (163)!

Meetings are held in Room 324 at Ellis Hall on University Avenue at Queen's University in Kingston, Ontario.

KAON (Kingston Astronomy Out-reach Network) sessions are held at Queen's Observatory on the 4th floor of Ellis Hall. ★



Got cloud? The answer has been an emphatic "Yes!" as clouds have been in abundant supply since November.

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The Flame and Horsehead Nebulae



Kim Hay reports: Past member **Jan Wisniewski** has rejoined. He and I have been chatting and he sent this image. Here are the specs: "The image was taken through a 80mm Zentstar APO with a modified Canon 350D. Seven 15-minute raw exposures were calibrated with IRIS and combined with AIP4WIN. The camera is not cooled, so imaging on a February night in the [Florida] Keys, when temperature was +24C, was challenging (due to thermal noise, luckily). BTW – the diffraction spikes are from a fishing line crossed in front of the objective – I always get asked about this..."

Reports and Other Items

From Kingston Centre, the RASC, and Beyond...

BLAST FROM THE PAST

One of the Centre's long-lost members from the 1970s, **Sandy McHattie**, has rejoined us and promises to visit when next in the neighbourhood. Welcome back!

AN ICON PASSES

John Dobson died peacefully on the morning of January 15th in Burbank, California. He was 98. Besides his prolific work popularizing Astronomy with the public, he is best-known for his invention of the Dobsonian telescope mount.

SOME ASTRONOMY ON BBC

Kevin Kell reports: *Stargazing Live* is an annual 3 day live TV broadcast of 60-90 minutes each night produced by the BBC that ran a couple of weeks ago. This was the fourth annual event and we just finished watching the three segments.

It is great to see what is going on in Great Britain. The last night, they had astronauts **Hadfield** and **Cunningham** along with Cassini Primary Investigator **Carolyn Porco** (remember her speaking at Starfest?). In any event with Chris Hadfield they did a lot of time on ISS issues and along came a skill testing question from the Doctor Who K9 unit:

What does a spatula, a tool bag, and Gene Roddenberry have in common? The answer was: they were all lost in space. This was the lead in to the astronaut **Heidi Stefanyshyn-Piper** who lost the tool bag during the first EVA of STS-126 on November 18, 2008. They then showed a video clip of the tool bag in orbit. At the end of the show up came a familiar credit... **Kevin Fetter!**

Nice to see your work showing up still Kevin!

JANUARY KAON SESSION

Paul Winkler reports on the *January 11th KAON session*: Of course, there was no observing last night, although **Nathalie Ouellette** offered to take interested people on a tour of the telescope dome.

The speaker, Prof. **Gregg Wade** from RMC, was wonderful and enthusiastic. He gave a very interesting talk about methods of detecting exoplanets using both spacecraft and ground-based scopes. With actual examples.

He mentioned MOST (the "humble" space telescope) and GPI (Gemini Planet Imager) several times during the talk, which was nice promotion for the Canadian connections.

Continues on page 3...

Regulus Needs You!

ITEMS OF INTEREST FROM MEMBERS—full articles, or even just a couple of paragraphs are always welcome. Items are gratefully accepted on each and every day of the year! Send items to:

walter (dot) macdonald2 (at) gmail (dot) com

If you are sending Word/Excel documents, please save them as Office 97-2004 format first.

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FEBRUARY KAON SESSION

Kevin Kell reports on the February 8th KAON session: Leading off the night was Prof. Kristine Spekkens (Royal Military College) speaking on "Why We Think Dark Matter Exists." There was a crowd of 75 people in the auditorium and the talk ran about 45 minutes. It was esoteric at times but the gist of it was, to theorize why we see what we see in the large scale structure of the universe, dark matter must exist. We do not know what it is yet but it must have certain properties and the computer models jibe nicely with observational realities.

It was cloudy with a little snow, so there was no observing tonight.

Paul Winkler, Brian Hunter, Kim Hay and myself were in attendance. ★

President's Message

Kim Hay

HAPPY NEW YEAR! I am sure that we are all ready for the next season, but winter is a great season for observing...when the skies are clear. So, dress in layers and grab your binoculars and telescope and peek at the sky for some much needed observing.

Since the elections, our Executive has been working on setting up our 2014 speakers, finalizing the year end donation receipts, and fulfilling all paperwork required for the Society.

We have also applied for Directors Insurance, a first for our Centre. This will protect us if need be, and we hope others may feel that they can come forward to serve on the Executive.

We will be having some great

speakers in the early part of the year. Hopefully we will be having some observing events in the local parks for members, KAON, Fall'n'Stars and more speakers at the tail end of the year. In December we will be having our Christmas Dinner again, and it will be at Aunt Lucy's.

Exciting news! **Kevin [K]** and **Walter** will be working on creating a new website for the RASC-KC using Drupal this year. If there are any members out that would like to be involved in helping to create our new website, please contact:

kingston@rasc.ca

A special thank you to **Susan Gagnon** who has lead the RASC-KC Starship for the last four years, it's been a great adventure.

Clear skies. ★

Past President's Message

YEAR END 2013

THANK YOU, KINGSTON CENTRE

AT THIS TIME I would like to express my gratitude to the Kingston Centre for allowing me to be President for the last four years. There have been some ups and downs with respect to our organization on the national level but as is usually the case in Kingston and so many Centres across the country it is the local group that keeps us sharing and enthusiastic. I really appreciated the feedback that I got from the Centre update emails that I sent occasionally. Every year I learn so much from the members who show up to meetings and events, write for *Regulus* or comment on the chat list.

Through 2013 we did not manage to have as many guest speakers as I would have liked but there never seemed to be a shortage of contributions from members. Regular displays of spectacular photos ranging from solar events to the most obscure objects of deep space and

photo essay progress reports on centre projects kept those of us in the audience interested and a bit envious at times.

Centre projects for the year included the ongoing struggle to make the LX-200 a functioning remote scope, final installation of the Torus scope and its rehabilitation and the building of a storage shed for the accumulated Centre observing assets. Projects such as these are great for a centre as they are typically too big for one person and must tap into the centre for work-gang participation. I think I can speak for most who participated in these events that they are fun and instructive. It is also important that I mention here that it is only due to the generosity of **Kim Hay** and **Kevin Kell** in the sharing of a great deal of their real estate and free time that these things have been possible.

Another member who has contributed greatly towards the transfer of the Torus scope and its functioning as well as many other projects is

Susan Gagnon, Past President-for-Life

Brian Hunter. The centre awarded Brian the A.V. Douglas Award in 2013 for past efforts as well as the successes of the last year.

Not to go unnoticed are the efforts of **Doug Angle** in getting the other big scope, the Venor, re-coated and ship-shape.

We learned from our guest speakers as well. Our friend and Queen's Observatory Coordinator **Nathalie Ouellette** updated us on the search for evidence of the Nature vs. Nurture influences in galaxy formation.

Tom Field was an online speaker experiment who worked out very well. Tom was able to show us what is possible by amateurs in the field of spectroscopy.

The June visit of our honorary president **David Levy** was an enjoyable social event. We were able to bring together some folks who had not had a chance to visit for sometime. Thanks also go to **Randy Attwood** of Mississauga Centre for

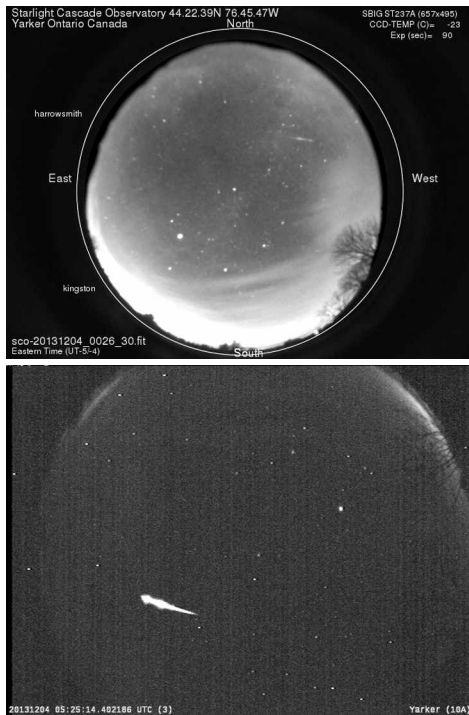
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SAT/SUN, NOV 30/DEC 1

Mark K: Around midnight, the rapidly fading remains of the heralded comet of the century slunk out of the LASCO C3 images and into darkness of the void. I wonder if any of the remains will ever be seen by anyone again?

Kohoutek had its West, what will it be for **ISON**? Bring on Lovejoy.

Kevin K: A nice big bright meteor today, just after midnight. It is hard to tell if it is a Geminid or not. I will have to take a star chart, put it upside down and compare it. It also appeared on the AllSky1 camera. The time was 05:25:14 UT. There was cloud just before and just after, so we got lucky!



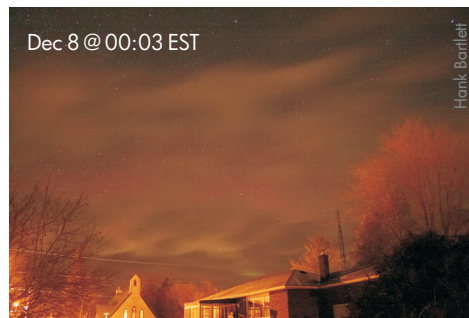
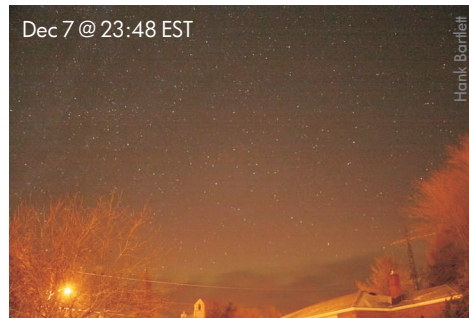
SAT/SUN, DECEMBER 7/8

Rose-Marie: Had the dog out a couple times during the evening, saw mostly clouds.

BigWetNose got me up at 4:00 when it was clear. I started waking up when I saw a nice clear sky, went back in for binocs and started

searching for Lovejoy. Found it. Got out the camera and barndoor tracker. Got a couple pics. It's just a little bitty thing, not the spectacular splash that Eyesore was supposed to be, but I saw it.

Hank: I was just going to sign off for the night when I saw the Kp = 6 and headed out about 11:45pm EST. Here are two images both have been lightened a little, the clouds OF COURSE came in quickly. Both images are f/3.5, ISO 1600, 25s. Image 1 there is definite green in the north, image 2 there is a little green still showing through over the house and what appears to be a band of red through the cloud just below center.



Kim: I woke up this morning and saw that it was clear, asked Kevin want to go see a comet: "NO" was the reply; after seeing it was -15C I wimped out and went back too bed.

Rose-Marie: Here's my shot of **Lovejoy** from the other morning, when it was actually clear. ISO 1600, f/3.5, 160 seconds on the barndoor tracker, 18-55mm lens at 18, white balance on tungsten setting. (The tungsten setting for white balance gives it the purply cast. I use it to get rid of the horrible reddish brown when it's set on auto balance. The



closer you are to town, the more noticeable it is.

WED/THU, DECEMBER 11/12

Mark K: I have found it quite frustrating. I get up to view Lovejoy and I am thwarted by clouds or haze. The past two mornings I have been unsuccessful, despite it being "clear." Clouds to the east and this morning thick haze that was leaking tiny ice crystals. Sometimes I think that comets and I are doomed not to meet.

FRI/SAT, DECEMBER 13/14

Kevin K: Last night was reasonably clear but with a lot of haze, moon and cars driving by. This is a compilation image of 91 meteors imaged last night on the Allsky2 camera system. This may be as good as it gets this year, what with cloud and snow now overhead.



Rose-Marie: Lots of lovely meteors, several look like they're from other directions? I got home last night around 10:00 p.m. from yet another holiday gathering, got out of the truck, looked up at the sky, saw one meteor. Was considering getting out

the camera, but after about 2 short minutes realized how darned COLD it was and thought better of it. Set the alarm for 3:00 a.m. to see if I could set up the camera by the dining room window to run a series, but there was a spiderweb of frost forming on the glass and it was clouding over. Stoked up the wood stove and crawled back into bed. Let's hope this cold spell is not the trend for winter.

FRIDAY, JANUARY 3, 2014

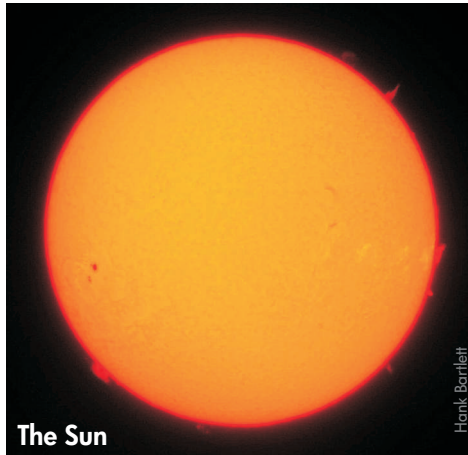
Rose-Marie: Finally a sunny day, and being in a major state of withdrawal I put the solar filter on the spotting scope and tried to get some shots of that big sunspot being reported on spaceweather.com.



Hank: I was out at lunch today with the C925 and the SM60, seeing was terrible! I clicked a couple of white light with my BlackBerry and 44 H α with the DSLR. I kept only H α and the white light was just for fun. You have a pretty good image there, better than anything I got. The air has to still some time, in the 925 I only had split seconds of focus and that is why I didn't go DSLR with it.

Kim: Great shot Rose-Marie. We saw the spot coming on New Year's Day.

Hank: Here is the H α image for what it is worth.



Walter: A clear night at last! There was a beautiful crescent Moon with Earthshine in the SW. It was very cold at -26C and I had to give the dome some assistance in turning. I ended a 7-hour imaging run about 00:50, bagging about 170 variables. I was able to clean out Cancer, Lynx and Hydra before ending. Looking at the satellite loop, cloud was no more than a couple of hours away at that time anyhow.

SATURDAY, JANUARY 4

Kim: Did manage to view the Sun through very hazy cloudy skies, but did see sunspot AR1944. AR1944 is naked eye, it's so big.

TUE/WED, JANUARY 21/22

Walter: A very cold night. Unfortunately the low temperature and the direction of the NW wind pushed the very substantial plume from the dairy plant right over the observatory, so I had to end the session shortly after it began. I got a baker's dozen of variables that were low enough not to be affected by the plume's passage.

WED/THU, JANUARY 22/23

Walter: The transparency was not good, so I sat this night out.

Kevin K: This is the second straight morning of -35C here and all of the

[house] windows have ice buildup on the edges and bottoms. I haven't even thought of any outside work.

The AllSky1 computer is still working outside in its thermal blanket. Funny, the CPU/Hard drive temperature sensors do not seem to display values lower than 0 C.

The Radiojove netbook is also continuing to work outside, also in a thermal blanket. Over the last couple of weeks it was dropping the audio feed at 00:00 when it switched data files. We reverted to an older version and it seems to be working fine.

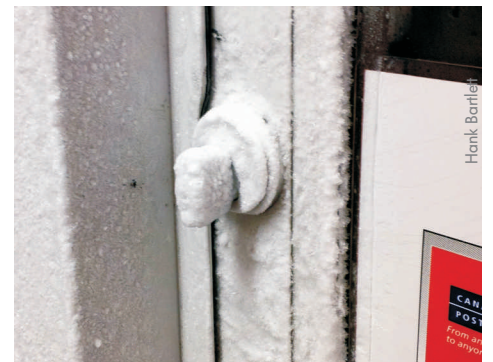
The Tardis/Torus systems were powered off 2 months ago and are hibernating like the Rosetta spacecraft.

There has been very little for me; Kim has done some solar observing and sketches this month...a handful of times, tops.

Hank: I have done 6 solar sessions so far this month and as for night observing, TOO COLD! I tried white light yesterday in the C925 but the seeing was horrible, this is too bad given all the sunspots there are. We are missing some good images of the nearing solar max. H-alpha has been OK but nothing notable that I have been able to see for myself. Over all seeing just is not good for solar this time of year.

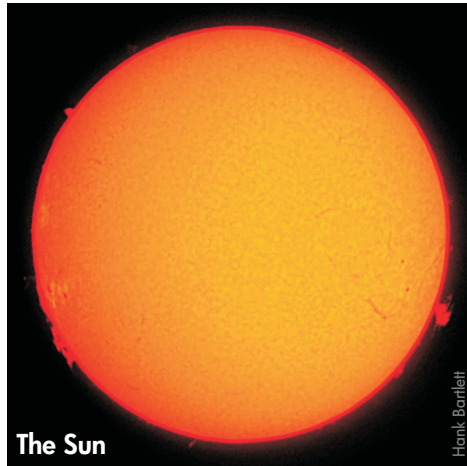
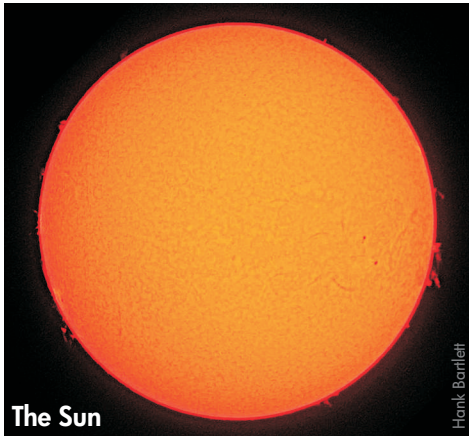
This image is not astronomical but "very cool!" This is the post office door inside on January 2nd about 5:30 p.m. Check out the face on the latch: Jack Frost?

Paul W: Looks like Jacob Marley to me.



MONDAY, JANUARY 27

Hank: There was actually clear steady sky today for the first time this month. There has been sunny days but there has almost always been cloud or haze around a sun that is constantly dancing. This image shows a steadier Sun and SS1944 coming around again on the east side. I took this after shoveling and snow blowing for an hour.



of the sunspots and the filament look like a smiley face?

Rick: AAVSO alert reports a supernova, type Ia, in M82 [SN 2014J]. It looks like it's about 11th magnitude so very easy even in smallish scopes. I wish I'd seen the announcement before observing on Sunday and Monday evenings. I really need to check e-mail more often!

WED/THU, JANUARY 29/30

Rick: I was out briefly last night to look at the supernova with my 20cm dob—it's very easy, showing quite brightly right on the centre line of M82, about 3' SW of the galaxy's core. Well inside the visible disk and about 10 or 10½ mag. I only noticed it was clear out around 23:00 and that M82 had cleared the trees so I got warmly dressed, lugged the scope out, charts, eyepieces, prepared to observe for a couple of hours as long as I was setting up. It clouded over after about 4 minutes so I packed it in.

MONDAY, FEBRUARY 3
NAKED EYE SUNSPOT!

Clark Muir *kicked things off with his report on the RASCals list:* Sunspot 1967 can be easily seen with unaided eye. The Transit of Venus glasses sure come in handy.

Walter: There is a nice big naked eye

sunspot visible today, just ever so slightly below dead centre of the solar disk. Be sure to take a look! It just goes to show you should always have a piece of welder's glass or eclipses glasses with you at all times.

Kim: I just got out to take a view of the sun, its been quite awhile. Now it's cloudy again. (It even snowed earlier today...while sunny, go figure.)

Rick: Still clear here and WOW! is that a great group! Obvious naked eye. And the seeing isn't even too bad—I'm just going down to the waterfront with the 20cm Dob to try and draw the group. I'm not sure but it looks like even the much thinner group (which, in its own much lower contrast/thinner way, mirrors the huge group to its S) may be at the limit of naked eye visibility.

WWWWWOOOOOWWWW!!
I just spent an hour on the dock looking at and drawing this spot group. Seeing was 4½/5, transparency 5/5. Before I could complete the drawing the seeing deteriorated to 2/5 as cumulus clouds began moving in. I couldn't possibly draw all the detail. If you look at the solar image from SDO/HMI on spaceweather.com that is exactly the level of detail I was seeing, only it looked better, higher contrast and white instead of their yellow/orange. There were spots smaller than the granulation—dozens of them all scattered around the main spots. And within the main spots the finest hairline striations in the penumbrae and also extremely narrow incursions of penumbra into the umbrae. This is without a doubt the best sunspot view I've ever had.

Kim: I had 2½ minutes to rush a sketch and it's been cloudy ever since.

Hank: At lunch I saw a little clear sky coming so I grabbed the DSLR, eyepieces and headed out to open the Rhaobs. Well it was a sincere

TUESDAY, JANUARY 28

Kevin K: It looks like the North York Astronomical Association (NYAA) has joined in to host an all-sky camera system from the University of Western Ontario. This is nice because it is now the closest camera to the one SCGO is hosting near Yarker, and we might get more cross coverage because of it. Oak heights is just north of Cobourg, only 119 km west of Yarker and has decent dark rural skies. (Previous to this the closest camera to the west of us was the Orangeville camera, approx 280 km west of Yarker.)

Hank: Today's image shows 1944 primed and ready.

Rose-Marie: Did you notice that two

Service Award Citation: Susan Gagnon

SUSAN IS A GOOD EXAMPLE of what flying under the radar can accomplish. What she has done is commit herself over two decades to the RASC Kingston Centre, fulfilling many roles. If we look at the last 20 years without her service, it is an eye-opening view. Below is the historical record of what Susan has done to enhance the RASC-Kingston Centre.

Susan joined the RASC Kingston Centre on January 1st, 1993. Since that time, she has slowly eased her way in, learning Astronomy and working to help the Centre grow. She has held a number of important positions in the Centre:

1995-1997	1997 GA Committee
1998-2000	National Council Rep
2000-2002	Secretary
2008-2009	Vice President
2010-2013	President

Though she is now stepping down as President after two consecutive terms, she is still carrying on with coordinating the Kingston Astronomical Outreach Network

(KAON) sessions. KAON is a monthly open house and public observing session the Centre holds in conjunction with the Queen's University Observatory. She has been a dependable regular volunteer at least as far back as 2003 and a Coordinator since 2007. She often brings her telescope, "Baby," and her binoculars to these sessions for the benefit of the public.

In Public Outreach over the years she has been a constant presence, whether at the Sky is the Limit Festival, or at Astronomy Day events held in the parks, libraries, and various shopping malls in Kingston. She has also helped out many times at Terrence Dickinson's annual Astronomy night in August at Charleston Lake. Susan has made presentations at the Cataraqui Conservation Area (February 2011), the Kingston Field Naturalists Bio Blitz (June 2012), countless sessions at schools and Guide/Scout meetings, and to the elderly in retirement homes.

Susan has arranged a couple of overnight observing sessions at the

Elbow Lake Environmental Education Centre and she has also been a regular member of the Fall 'N' Stars star party's organizing committee for 12 years now.

Susan is always helping out wherever she can, when we are short volunteers, and she has an infectious smile and laugh that welcomes all who come into her presence. To us she is Superwoman, but she is terribly modest and self-effacing. Best of all she is our friend and well deserving of this award.

The RASC Service Award is given to members in recognition of outstanding service, rendered over an extended period of time, where such service has had a major impact on the work of the Society and/or of a Centre of the Society.

After the cat was finally let out of the bag, Susan replied: Thanks to all for the kind thoughts. I don't do much for the Centre that I do not wish to do. You are a great bunch to work with.

Will I ever know whose idea this was? Hmmm...★

...Observing Reports

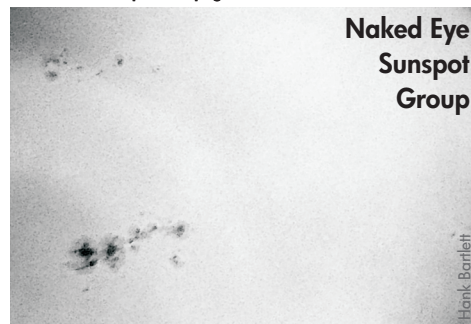
attempt but of course the clear spot went off to one side and never really happened. All I got was a few BB eyepiece images with bad reflection and high grain through the cloud cover. I so wanted to get some clear images today to compare with my 2003 images of a similar spot—1967 is almost as good as 1967 itself was. ☺ It would have been nice had it been clear here as it was for Rick. Tomorrow it is Mom shopping day so it will probably be clear then.

Although you have all seen it before as it is one of my favorites I have also attached the 2003 image.

Don't get me wrong here I am not pooh-hooing drawing but isn't that why we invented cameras?

Kim: Cameras only work on certain

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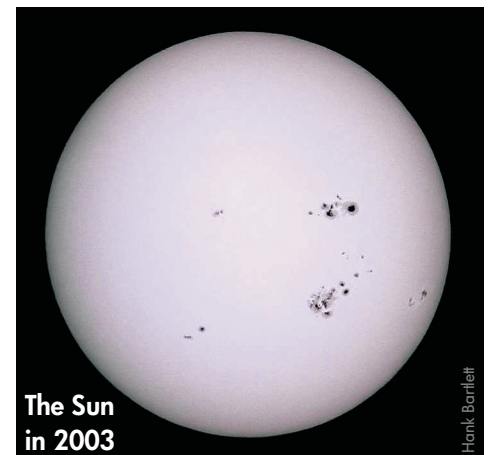


telescopes for imaging; pencil always works.

Hank: You definitely would not want to see one of my drawings.

Rick: I must say, given my drawing skills I would prefer to image but am not set up right now for it. Plus, I find drawing really enhances the observing experience - you have to look and look and look—whereas with

Various Members



imaging I feel like I shoot and shoot and shoot and then go off having never really seen the subject (be it a sunspot, a nebula, a tourist attraction, or a wedding.)

Continues on page 9...

An Introduction to Leo Enright's Observing Logs

David H. Levy

LEO ENRIGHT WILL BE REMEMBERED FOR MANY THINGS, but his many friends in the astronomical community will always treasure his love and passion for the night sky. He took that love seriously enough that he recorded all his observing sessions, an act which I consider to be a primary marker of a serious and committed observer of nature. "We become observers to see for ourselves the things of which we have read," **Isabel K. Williamson** wrote in November 1964. "If, in addition, we have the satisfaction of knowing that our observations are of some scientific value, that surely is in the nature of a bonus."

Leo's observing logs themselves are of value to science for they record the details of objects and events in the changing night sky over a lifetime. Leo's delight in the night sky was an ideal outlet for the logic of his powerful mind. He and I first met at Clubs Night at Queen's University at Kingston, on October 4, 1977, twenty years to the day after Sputnik entered history as Earth's first artificial satellite. At the time I wanted to transfer my RASC membership from Montreal to Kingston, and I was immediately impressed by his obvious appetite for observing. (I now hold memberships in both centres.) Back then, Leo was the editor of *Regulus*, the Kingston Centre's newsletter. He crammed his newsletter with many types of material that one would rarely find elsewhere. My favourite was "For your compendium of esoteric facts." Here I'd find such interesting tidbits as the "Milk Moon" which traditionally refers to the full Moon each May. Leo was a teacher whose lessons extended beyond the classroom; his joy at educating his colleagues about things like this was profound.

Leo was planning and building his observatory around the time I met

him. At first, the sliding roof structure housed his 8-inch Celestron telescope. It seemed a cavernous building for a relatively small telescope. Some years later he replaced the 8 with a mighty 14-inch Celestron, a beautiful telescope which served him faithfully for the rest of his life. It was this telescope that showed him the Moon countless times, the planets and particularly the impact spots from the comet collision of 1994, as well as many comets and other exciting targets. However, he still kept his older 8-inch set up outside the observatory. With this telescope he indulged his taste for observing the Sun, drawing its sunspots as the solar cycles ebbed



Leo Enright's logbooks consist of 31 volumes totaling over 2,700 pages. They cover the period 1980 through 2008.

rasc.ca/leo-enright-logbooks

and flowed. I remember his speaking with me over the telephone, talking excitedly about his counts of sunspots. As he talked to me, Leo seemed to give the impression that the Sun sang to him. **Galileo** himself could have felt no greater thrill.

From the time I met Leo until his death decades later, I shared many observing sessions with him. And as esoteric as some of these sessions became, Leo never forgot to emphasize the basics. Of the many times I have had the honour of observing with Leo, two particular

observing sessions stand out. The first took place at his home on Sharbot Lake, Ontario, about an hour's drive north of Kingston. At three o'clock on a frigid February morning, we shuffled out on the frozen lake and looked eastward to see the Great Comet of 1997. The comet's co-discoverer **Tom Bopp** joined us that session. As the poet Gerard Manley Hopkins wrote, it looked "like a shuttlecock at the height."

The second session I remember vividly was the August 11, 1999 total eclipse of the Sun, which we witnessed aboard the cruise ship *Regal Empress*. The fifty second total phase took place shortly after sunrise, minutes after the shadow plunged downwards from heaven and enveloped us all in an unearthly hush. Watching with our wives, **Denise Sabatini** and **Wendee Wallach-Levy**, made the event even more special. There were two other observers with us on that memorable trip—**Roy Bishop** and his wife, **Gertrude**. They stood a few feet from me during the eclipse.

Later that day Leo and I discussed an observation I made in the hours before the crescent Sun rose in the east. I had located an object in the northeastern sky, which turned out to be an independent discovery of Comet Lee (C/1999 H1). Just a few hours before a total eclipse of the Sun, my pleasant quarter-hour getting acquainted with this comet added to the magic of that early morning.

In that same year, Leo spent time photographing Mars, not to learn about its physical properties but to study its motion back and forth among the stars of the constellations Libra and Virgo. These are simple photographs. They will not win prizes or be displayed on internet sites; those honours were of no real interest to Leo. But they clearly

...Observing Logs

show the dance of this world about the Sun, and how it appears to become stationary in the sky, then move westward, and finally resume its eastward motion after the Earth has overtaken it. Leo had a knack for basic observational work; understanding aspects of the sky, how these aspects connect to our Earthly home, and then teaching these aspects to others.

Quite often Leo and I would enjoy telephone conversations across a continent about shared sessions involving lunar eclipses and meteor showers. Although he only visited my Arizona home once—in the spring of 1981—I enjoyed several visits to his lakeside home. Here we enjoyed some of Canada's darkest nights. It was really a privilege to share these times with Leo. He could always fill my time with a unique story about one of the constellations, or some detail from the life story of a long-gone skygazer.

Leo is no longer with us. However, the records of his many happy nights under the sky will live on as long as there are people to read and savour them. Thanks to **Randall Rosenfeld**, the RASC archivist, and **Walter MacDonald** of the Kingston Centre, Leo's observing records are now available for all to savour. Much more than a monument, these logs, and all the patience, data, and observing procedure they teach, will help to keep the spirit of Leo's passion alive. ★

Editor's Note: It is hard to believe that Leo has been gone for almost five years now. Villa Leonis was the home base for all the years of great astronomical history that he made with his friends from the Kingston Centre and all points beyond. I'm sure when we think of Leo, we can't help but think of

A happy house in that long-gone sunshine;
And a face in the glass-bright moon,
And a voice at which even memory falters,
Now that the speaker's gone.
—Inward Companion, Walter de la Mare

Donations to the Centre

UPDATE: 2014 JANUARY 10TH

The RASC Kingston Centre is a registered Canadian charity (#827905720RR0001), able to receive donations and issue tax receipts. In 2013 we received just over \$1,378 in donations to the Centre.

Charitable donation receipts for the calendar year 2013 were mailed out on 2014 January 10. If you made a donation in the calendar year 2013 and do not see your name listed below and have not received your tax receipt in the next week or so, please let me know and I will review the records.

Donations that are not specifically targeted towards any specific purpose go into our Observatory Fund. Each year the RASC-KC continues to advance (albeit more slowly in some years) in its mission of establishing an observatory site in the Kingston area.

In our 2012-2013 fiscal year we funded a \$75 Science Fair Prize in Astronomy, spent over \$1501 on education and public outreach events and meetings and over \$289 on equipping a portable roll off building observatory hosting the 16" Torus telescope that is on long term loan to the Centre.

The goal of the RASC-KC is to continue to make a difference in amateur Astronomy, public education/outreach, and Science. With the help of donations from supporters such as you, we will continue to see improvements in our abilities to achieve these goals.

Thanks again for your generous support of our efforts. The donation page on our website will be updated in the near future:

🔗 kingston.rasc.ca/donations.php

This page records donations in our fiscal year, which runs from October to September, and not in the Canada Revenue Agency calendar year. ★

Kevin Kell, Treasurer

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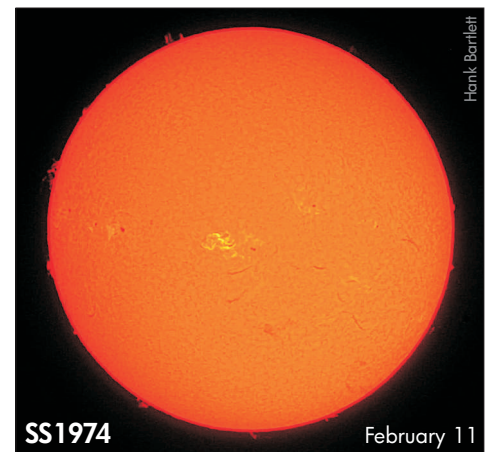
Thank You!

...Observing Reports

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Mark K: We have been experiencing mixed conditions today, sometimes clear and other times cloud. Going up the chair at Owl's Head, the clouds were passing over the Sun in such a way that it would obscure it and then reveal a very faint disk through the cloud cover. A large sunspot is easy to see without any optical aid using the cloud cover as a filter. Not a recommended method for observing the Sun, I might add, it was a chance observation.

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...Past President's Report

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his efforts of the last few years to arrange the speaking tour.

While there was the obligatory complaining about the lack of observing weather there seemed to be a lot of observing reports. I also suspect that while most members enjoy a beautiful bright comet for photos, many of you also loved the challenges provided this year by the fainter specimens on offer.

Fall'N'Stars offered little observing this year but it did not rain continuously. Several rockets were launched and none lost! The weekend still provided many chances for visiting and a very relaxed banquet that went on for hours. Thanks to all volunteers who make this weekend possible.

We also had an observing outing planned for **Tessa Clarke's** house this fall. We arrived to cloudy skies and went inside to talk astrophotography. It was only when leaving for home that we emerged to find a stunningly clear sky. It would be nice to try again.

The Kingston Astronomy Outreach Network (**KAON**) observing sessions at the Queen's Observatory will continue in 2014. It is not the best spot for observing faint objects, but the public never tire of seeing the Moon and planets, and we have enjoyed some great talks and lots of folks come out to have a look.

Several members attended events at the North Frontenac Dark Sky Observing Site and the Lennox and

Addington Dark Sky Observing Area. These events were well advertised to the public and hopefully will stir an interest in preserving our starry skies.

The year wrapped up with our Christmas dinner out at Aunt Lucy's Restaurant. It was well attended and enjoyed. Thanks to **Kim** for the organizing of this.

I would now like to thank the Executive of the last year and welcome the newest members to the board. **Rose-Marie Burke** is our new Secretary and **Paul Winkler** is a 'board-member-at-large' or 'without portfolio' one might say. Both will be great assets to the Executive providing fresh perspective from their varied backgrounds.

Thanks to **Kevin** for being such a great Treasurer. Here is a guy that works very hard to make sure that we follow the rules without exception and that we have the paper to prove it. Among other tasks that he has taken on is the asset inventory, chat list moderation and when not coordinating, assisting in most large projects. This is a lot of additional work for a treasurer to pick up and it is noticed and appreciated.

Kim also devotes a lot of time to the Centre. It was much appreciated when she stepped in to fill the position of Secretary when the need arose and then a Vice-President-Secretary combo! She also manages to remain active at the national level, and picks up other tasks unrelated to

her board responsibilities.

Another member who we do not get to see as often as we would like and has also devoted quite a bit of real-estate to the Centre is our Librarian **David Maguire**. David keeps up with books we should have but is always interested in member input. We hope to see more of David in 2014.

Communication in the Centre would not be what it is without our website and our newsletter, *Regulus*. Thanks to **Walter MacDonald** for getting the word out to members. While some of us were nostalgic for the arrival of a paper copy of *Regulus* arriving in the mail, it is hard to beat the online full-colour version that allows us to enjoy the great photos that Walter includes.

To our new President, Kim, I say congratulations! I know you will tackle it all with great enthusiasm as usual. I hope to volunteer all I can in 2014 and support the Executive where I can.

Thanks to all the folks who came out this year to volunteer where they could. **Richard Weigand**, first-time volunteer, and **Andrew Hill**, a returning member came out and were great help this year. Even if you can only come out to one event it is helpful and provides a chance for members to get to know each other better. Let's get behind our new Executive and make 2014 a great year, because the weather will be unusually favourable for observing! ★

...Observing Reports

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STARLIGHT CASCADE UPDATE

Kevin: We have switched the exposure times from 90 seconds down to 60 seconds on the AllSky1 system. This will decrease the washout caused by moonlight and maybe give a few extra days of

meteor detection ability every month. These shorter exposures have the effect of increasing the down time in each image cycle. It used to be 90 seconds exposure + 10 seconds download = 10/100 or 10% downtime. Now it is 60 seconds exposure + 10 seconds download =

10/60 or 17% downtime. Oh well. It was a free system and it continues to work for seven years and counting now.

The Allsky2 system (from UWO) is coming up on its second anniversary on June 8th. ★